

<b>Application Number</b>  	<b>Application/Control No.</b>	<b>Applicant(s)/Patent Under Reexamination</b>
	10/764,914	SIBRAI ET AL.
	<b>Examiner</b> Hiep Nguyen	<b>Art Unit</b> 2816



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,914	01/26/2004	Andreas Sibrai	DS03-005B	3363
7590		10/30/2007	EXAMINER	
~ STEPHEN B. ACKERMAN			NGUYEN, HIEP	
28 DAVIS AVENUE			ART UNIT	PAPER NUMBER
POUGHKEEPSIE, NY 12603			2816	
		MAIL DATE	DELIVERY MODE	
		10/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/764,914 Examiner Hiеп Nguyễn	SIBRAI ET AL. Art Unit 2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 August 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4,6-23,26-28,30-49,51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4,6-23,26-28,30-49,51 and 52 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 August 2007 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____.                         |

### **DETAILED ACTION**

This is responsive to the amendment filed on 08-08-07. Applicant' arguments with respect 35 U.S.C. 112, 2<sup>nd</sup> are not persuasive. The Applicant fails to respond to the 112, 2<sup>nd</sup> problems of the claims raised in the previous office action.

#### *Drawings*

The drawings are objected to because the new figure 10b is not correct. The input of the (Temp-comp) circuit (Ref-out-10) cannot be connected to the output(s) of the translinear amplifier as explained in the Remarks page 27. This input should be connected to ground (Vss) as shown in old figure (10). It is not clear what the “a circuit” on line 16 in claim 1 is in the drawing.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### *Claim Objections*

Claim 6 is objected to because of the following informalities: the recitation “input refrencelevels” is misspelled. It should be changed to “input reference levels”.

In claim, the recitation "a signal" on lines 1-2 is objected to because there are more than one signals generated by the "said circuit", depending on the tuning voltage (Vtune).

In claim 10, it is not clear whether the recitation "said circuit" on lines 1-2 is the same or different from the "a circuit" on line 1 of claim 1 or "a circuit" on line 16 of claim 1.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 6-23, 26-28, 30-49, 51 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and/or clarification is required.

Regarding claim 1, the recitation "a circuit to individually provide input and output reference levels for each of said capacitor switching stages, **building** the input reference levels and the output reference levels for each of said translinear amplifiers, comprised within said capacitor switching stages" is indefinite because of the following reasons:

a. It is not clear what the "a circuit" on line 16 in claim 1 is in the drawing and what the input and output reference levels for each of said capacitor switching stages are.

b. The recitation "**building** the input reference levels and the output reference levels for each of said translinear amplifiers, **comprised** within said capacitor switching stages" is confusing because it is not clear how the input reference levels and the output reference levels can be "built" for the said translinear amplifiers and at the same time can be provided for each of "said capacitors switching stages". As understood by the examiner, the "capacitor switching stage" comprises translinear amplifiers and switches.

Clear explanation is required.

Regarding claims 17 and 26, the recitation: "a circuit to individually provide input and output reference levels for each of said capacitor switching stages, **building** the input

reference levels and the output reference levels for each of said translinear amplifiers, comprised within said capacitor switching stages” is indefinite for the same rationale raised in the 112,2<sup>nd</sup> paragraph rejection of claim 1.

Regarding claim 33, the recitation “and a circuit to individually input and output reference levels for each of said capacitor switching stages, an input signal, dependent on the tuning voltage, dedicated for the voltage controlled capacitance change and provided to all of said capacitor switching stages; providing an individual input and output reference levels for each individual capacitor switching stage” on lines 11-17 is indefinite because it is confusing. Figure 1-b shows that circuit (Temp-Comp) provides only a reference signal (Vref) as input to all the translinear amplifiers. The recitation “said signal” on line 18 is indefinite because it is not clear as to this “said signal” is the same or different than the “input signal” on line 13. The recitation “said signal” lacks antecedent basis. The recitation “said input reference” on line 21 lacks antecedent basis. The recitation “the linear control signal” on line 22 is indefinite because it is not clear as to this “the linear control signal” is the same or different than the “input signal” on line 13 and “said signal” on line 18. The recitation “with increasing/decreasing share” is indefinite because it is not clear what it is meant by.

Regarding claim 43, the recitation “an input signal” on line 20 is indefinite because it is misdescriptive. Figure 9 shows that there are multiple “input signals” for controlling the switches (Sw1-Swn). The recitation “and a circuit to individually provide input and output reference levels for each of said capacitor switching stages” on lines 18-20 is indefinite because it is misdescriptive. Assume that this circuit is the voltage divider (R1-Rn). This circuit only provides output reference values for the translinear amplifier. Clear explanation is required. The recitation “said circuit” on line 25 lacks antecedent basis. The recitation “the linear control signal on lines 29 lacks antecedent basis. The recitation “with increasing / decreasing share” is indefinite because it is not clear what it is meant by.

Regarding claim 47, recitation “and a circuit to individually input and output reference levels for each of said capacitor switching stages, an input signal, dependent on the tuning voltage, dedicated for the voltage controlled capacitance change and provided to all of said capacitor switching stages; providing an individual input and output reference levels for each

individual capacitor switching stage" on lines 10-14 is indefinite because it is confusing. Figure 1-b shows that circuit (Temp-Comp) provides only a reference signal (Vref) as input to all the translinear amplifiers. The recitation "said signal" on lines 17 lacks antecedent basis. The recitation "the linear control signal" on line 21 lacks antecedent basis. The recitation "compensating the temperature deviation of said switching device, using said circuit to compensate the temperature deviation of said switching device" on lines 28 and 29 is indefinite because it is misdescriptive. As understood by the examiner, "the circuit" in the claim is the voltage divider that is recited on line 10-12. The "said circuit" on line 28-29 is a different circuit. This is circuit (Temp-Comp) that compensates the temperature deviation of said switching device. The Applicant is requested to point out the "a circuit to individually input and output reference levels for each of said capacitor switching stages" and to show a circuit for "providing an individual input and output reference levels for each individual capacitor switching stage" in the drawing. The recitation "compensating the temperature deviation of said switching device, using said circuit to compensate the temperature deviation of said switching device" is indefinite because it is not clear which "said circuit" compensates the temperature deviation. The recitation "said circuit" lacks antecedent basis.

Claims 2-4, 6-16, 18-23, 27, 28, 30-32, 34-42 and 44-46, 48, 49, 51 and 52 are indefinite because of the technical deficiencies of claims 1, 17, 26, 33, 43 and 47.

#### *Response to Arguments*

Applicant's arguments filed 08-08-07 have been fully considered but they are not persuasive. In the Remarks , page 27 the Applicant argues that "The specification and drawings are amended in two ways: First, an amended Fig. 10b now shows an input, receiving the output reference voltage as it is provided by the reference circuit RefCirc of Fig. 6 and as it was already described in the specifications". This argument is not persuasive because figure 6 is a different version of figure 9 that the circuit of claim 1 reads on. The "output reference voltage" (Ref-out1) in figure 6 is similar to the signal (C-Ref-Out) in figure 9 or signal (Ref-out-c-10) in figure 10b. Therefore, the "an input" of figure 10b cannot be the output (Ref-out-c-10) of figure 1. As understood by the Examiner, the amended circuit (10b)

**is wrong.** The old circuit 10 is correct because the diode connected transistor (N2-10) combined with the current source (I1-10) coupled to the ground provides a reference voltage to the output of the translinear transistor(s) as a compensation voltage. In new figure (10b) the combination of translinear transistor and diode is incorrectly connected to another reference voltage (REF-out-10) to provide a reference voltage (Ref-out-c-10). In conclusion the above argument does not make sense and figure (10b) is incorrect. The Applicant is requested to explain clearly the meaning of claim 1 from lines 15-19.

In page 28, the Applicant argues that the recitation “said signal” refers to “an input signal” and “said input reference” refers to “the input references of “input and output reference levels”. In fact, “said signal”, “an input signal”, “said input reference” and “the input references of input and output reference levels” are different recitations, thus; the 112,2<sup>nd</sup> paragraph problem of claim 33 remains.

### ***Conclusion***

In view of the significant 112, 1<sup>st</sup> and 112, 2<sup>nd</sup> paragraph indefiniteness issues noted above, no prior art could be applied by the examiner at this time since the scope and meaning of the claims cannot be determined. This is not an indication of allowance.

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

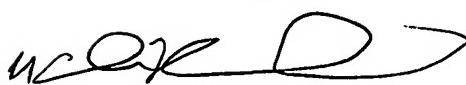
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Richard N can be reached on (571) 272-1736. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hiep Nguyen

10-25-07



N. DREW RICHARDS  
SUPERVISORY PATENT EXAMINER